

**IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF TEXAS  
WACO DIVISION**

**WSOU INVESTMENTS, LLC D/B/A  
BRAZOS LICENSING AND  
DEVELOPMENT,**

*Plaintiff,*

**v.**

**MICROSOFT CORPORATION,**

*Defendant.*

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**CIVIL ACTION 6:20-cv-00454-ADA  
CIVIL ACTION 6:20-cv-00461-ADA  
CIVIL ACTION 6:20-cv-00465-ADA**

**PLAINTIFFS' OPENING CLAIM CONSTRUCTION BRIEF**

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Plaintiff WSOU Investments, LLC d/b/a Brazos License and Development (“WSOU”) submits the following opening claim construction brief pursuant to the Order Governing Proceedings (“OGP”) and the Scheduling Order entered in this case.

## **I. Legal Standards**

### **A. Claim Construction Generally**

The general rule is that claim terms are generally given their plain-and-ordinary meaning. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (*en banc*); *Azure Networks, LLC v. CSR PLC*, 771 F.3d 1336, 1347 (Fed. Cir. 2014), *vacated on other grounds by* 135 S. Ct. 1846, 1846 (2015) (“There is a heavy presumption that claim terms carry their accustomed meaning in the relevant community at the relevant time.”). The plain and ordinary meaning of a term is the “meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.” *Phillips*, 415 F.3d at 1313. “Although the specification may aid the court in interpreting the meaning of disputed claim language, particular embodiments and examples appearing in the specification will not generally be read into the claims.” *Comark Commc’ns, Inc. v. Harris Corp.*, 156 F.3d 1182, 1187 (Fed. Cir. 1998) (quoting *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988)). Although extrinsic evidence can also be useful, it is “less significant than the intrinsic record in determining the legally operative meaning of claim language.” *Phillips*, 415 F.3d at 1317 (quoting *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 862 (Fed. Cir. 2004)).

This Court recently explained that “[t]he ‘only two exceptions to [the] general rule’ that claim terms are construed according to their plain and ordinary meaning are when the patentee (1) acts as his/her own lexicographer or (2) disavows the full scope of the claim term either in the specification or during prosecution.” *CloudfChange, LLC v. NCR Corp.*, No. 6-19-CV-00513-ADA, 2020 WL 4004810, at \*2 (W.D. Tex. July 15, 2020) (quoting *Thorner v. Sony Computer*

*Entm't Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012). “To act as his/her own lexicographer, the patentee must ‘clearly set forth a definition of the disputed claim term,’ and ‘clearly express an intent to define the term.’” *Id.* (quoting *Thorner*, 669 F.3d at 1365). And “[t]o disavow the full scope of a claim term, the patentee’s statements in the specification or prosecution history must represent ‘a clear disavowal of claim scope.’” *Id.* (quoting *Thorner*, 669 F.3d at at 1366). “Accordingly, when ‘an applicant’s statements are amenable to multiple reasonable interpretations, they cannot be deemed clear and unmistakable.’” *Id.* (quoting *3M Innovative Props. Co. v. Tredegar Corp.*, 725 F.3d 1315, 1326 (Fed. Cir. 2013)).

## **B. Indefiniteness**

The Patent Act requires claims to particularly point out and distinctly claim the subject matter regarded as the inventions. 35 U.S.C. § 112, ¶ 2. To satisfy this requirement, the claim must be read in light of the intrinsic evidence to determine whether it informs one of skill in the art at the time of the invention “about the scope of the invention with reasonable certainty.” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 910-11 (2014). To establish that a claim is indefinite, a patent challenger must prove indefiniteness by clear and convincing evidence. *Sonix Tech. Co. v. Publ’ns Int’l, Ltd.*, 844 F.3d 1370, 1377 (Fed. Cir. 2017).

## **II. Terms of U.S. Patent No. 7,106,702 (Case No. 6:20-cv-00461-ADA)**

### **A. Disputed terms of the ’702 patent which only Microsoft seeks to construe**

- 1. “AAA function capable”, “equipped to carry out authentication, authorization and accounting (AAA) functions for the network”, and “equipped to conduct authentication, authorization and accounting (AAA) functions for the network”**

Microsoft errors in seeking an omnibus construction for distinct terms recited in different contexts in various claims. Specifically, Microsoft seeks to construe (1) “AAA function capable” (recited in the preamble of claim 1), (2) “equipped to carry out authentication, authorization and

accounting (AAA) functions for the network” (recited in the body of claim 11), and (3) “equipped to conduct authentication, authorization and accounting (AAA) functions for the network” (recited in the preamble of claim 18) to all mean “equipped to conduct all three of authentication, authorization, and accounting functions.” These varying phrases reveal on their face that when the patentee intended an “equipped to” requirement, it said so. Furthermore, courts have recognized a meaningful distinction in claim language directed toward *capability*, as opposed to *configuration*. See, e.g., *Intel Corp. v. U.S. Int’l Trade Comm’n*, 946 F.2d 821, 832 (Fed. Cir. 1991) (adopting a broader interpretation of claim scope because the claim language was expressly drawn towards the capability of the feature); *SIPCO, LLC V. Abb, Inc.*, 2012 Markman 3112302, 2012 WL 3112302, \*7-\*11 (E.D. Tex. 2012) (refusing to limit “configured to” in describing a communication protocol to the embodiments shown in the specification, but also refusing to broadly construe it to just mean has the capability and instead construing the term to mean “actually programmed or equipped with hardware or software to”).

In claim 1, the disputed phrase appears in the preamble as follows: “[a] method of maintaining authentication, authorization and accounting (AAA) functionality for a wireless communications network having a plurality of nodes which are *AAA function capable*[.]” It appears that Microsoft has taken the position that the preamble of claim 1 is limiting. While the method is directed to “maintaining authentication, authorization and accounting (AAA) functionality”, the preamble recites that the “plurality of nodes” themselves need only be “AAA function *capable*” (where function is recited in the singular). Even if deemed limiting, this preamble recitation does not expressly require that *each* node of the “plurality of nodes” must necessarily be presently “equipped to conduct all three of authentication, authorization, and accounting functions” (in the plural), as stated in Microsoft’s construction for this preamble phrase.



For the other two phrases Microsoft identified, recited as “equipped to [carry out / conduct] authentication, authorization and accounting (AAA) functions for the network”, no construction is necessary for either phrase apart from the claim language itself. Each phrase is plain on its face, particularly with use of the word “and” as the conjunction.

## **2. “the AAA functions”**

Out of an abundance of caution, WSOU submits the term “*the* AAA functions” for construction only for the Court to take judicial notice that this term (as recited in independent claims 1, 11 and 18) makes reference to the antecedent recitation of “authentication, authorization and accounting (AAA) functionality”. Microsoft does not appear to dispute that use of the article “the” in the term “the AAA functions” is an antecedent reference to the aforementioned functionality. Given this apparent agreement, it is unclear why Microsoft further seeks to add “all three” in its proposed construction, which is an expression not stated anywhere in the ’702 patent.

## **3. “active nodes”**

The term “active node” (recited in all issued claims of the ’702 patent) should be construed, consistent with lexicography of the specification, to mean a “node in an active state of AAA functionality.” This definition reflects the following lexicography set forth in the specification: “[h]erein, the terms ‘active’ and ‘non-active’ when used in the context of ‘active node’ and ‘non-active node’ refers to the *state* of the node’s AAA functionality (i.e., its AAA server is active or non-active, respectively), and not to the general state of the node as a whole.” (’702 patent, 3:22-279, emphasis added.) See *Jack Guttman, Inc. v. Kopykake Enterprises, Inc.*, 302 F.3d 1352, 1360-61, (Fed. Cir. 2002) (“Where, as here, the patentee has clearly defined a claim term, that definition usually is dispositive; it is the single best guide to the meaning of a disputed term.”); *Fisher-Rosemount Sys., Inc. v. Invensys Sys., Inc.*, No. A-13-CA-587-SS, 2015 WL 1275910, at \*11 (W.D. Tex. Mar. 19, 2015) (instructing that “[c]lear definitions are usually set off by quotation marks or

are marked by the word ‘is.’”) (citing *Sinorgchem Co., Shandong v. Int’l Trade Comm’n*, 511 F.3d 1132, 1136 (Fed. Cir. 2007)).

Microsoft errs in refusing to recognize that the above lexicography controls here. *Id.* Rather than propose a construction that comports with the above lexicography, Microsoft seeks to redefine “active nodes” to mean “nodes that carry out the AAA functions for the network by employing their respective user databases.” The Court should reject Microsoft’s departure from the specification lexicography.

Microsoft’s erroneous definition should also be rejected as potentially encompassing nodes that are not in an “active” state with respect to AAA functionality and thus are not properly considered “active nodes” in the context of the claims. The specification discloses, with reference to Figures 1 and 2, that “during step 20, preferably, *all of the nodes* are initially provisioned with duplicate copies of the user database employed to carry out AAA functions.” (’702 patent, 3:29-31, emphasis added.) Under Microsoft’s erroneous definition, all nodes of this embodiment would qualify as “active nodes”—regardless of their present *state* of AAA functionality—because, in this example, each is at least provisioned with copies of the user database employed to carry out AAA functions. This result is inconsistent with the lexicography discussed above.

In addition, Microsoft’s construction risks excluding preferred embodiments at least by seeking to require that the claimed “active node” must itself “carry out the AAA functions.” The lexicographic statement above appears within the following relevant description of a preferred embodiment:

While preferably all the nodes are AAA function capable, at any given time, only the active nodes act as AAA functional entities for the network 10. That is to say, only the active nodes have their AAA functions *and/or servers* activated or turned on, while the non-active nodes have their AAA

functions *and/or servers* dormant or turned off. Herein, the terms “active” and “non-active” when used in the context of “active node” and “non-active node” refers to the state of the node’s AAA functionality (i.e., its AAA server is active or non-active, respectively), and not to the general state of the node as a whole. That is to say, “non-active” nodes are in general still functional, it is just their AAA functions and/or servers that are non-active.

(*Id.*, 3:16-29, emphasis added.) Use of the alternative conjunctions “and/or” in the above description signals the disclosure of *alternative* preferred embodiments, including at least (1) a first preferred embodiment where a node is in an active state because its AAA functionality is turned on and it carries out such functionality; and (2) a second preferred embodiment where the node is in an active state because its AAA server is “activated or turned on,” thereby enabling the *server* to carry out AAA functionality for that node. (*Id.*)<sup>1</sup> Microsoft’s construction would risk excluding at least this second preferred embodiment.

Finally, Microsoft also errs in seeking to newly require that all “active nodes” must employ *a respective user database*. The doctrine of claim differentiation proscribes Microsoft’s attempt to import limitations from a dependent claim into an independent claim. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1315 (Fed. Cir. 2005) (*en banc*) (“The presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim.”). While independent claim 1 recites various limitations directed to the “active nodes” term, claim 1 does not recite a “user database” element. By contrast, claim 8, which depends from claim 1, further recites (in part) “provisioning each of the plurality of nodes with a

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<sup>1</sup> The specification confirms elsewhere that a node need not necessarily *include* an AAA server but rather may support a server external thereto. (See, e.g., *id.*, 3:7-9.) (“Each node is also capable of acting as the AAA functional entity for the network, e.g., by including and/or supporting a AAA server.”)

duplicate copy of a user database, each of said user databases being employed by its respective node to carry out AAA functions.” Microsoft’s erroneous construction appears to be an attempt to impermissibly import limitations from claim 8 into claim 1. This is contrary to well established law. *Id.*

**4. “monitoring the active nodes to determine if one of the active nodes gets disconnected from the network”, “said active nodes monitoring one another to detect if an active node becomes disconnected from the network”, and “monitoring the active nodes to detect if one becomes disconnected from the network”**

The disputed “monitoring” phrases require no construction here. As recited in claim 1, the disputed phrase recites “monitoring the active nodes to determine if one of the active nodes gets disconnected from the network.” Independent claim 18, also written in method form, similarly recites “monitoring the active nodes to detect if one becomes disconnected from the network[.]” Independent claims 1 and 18 do not expressly attribute their respective “monitoring” to any particular element(s); and thus both claims are agnostic as to whether the claimed “monitoring” is effected exclusively by one active node monitoring another. This plain reading of the claim language is confirmed by dependent claim 3, which recites “[t]he method of claim 1, wherein each active node carries out the monitoring of the other.”

Microsoft’s construction should be rejected as another attempt to import limitations (this time from claim 3 into claim 1). *Phillips*, 415 F.3d at 1315. Specifically, Microsoft errs in seeking to rewrite the “monitoring” step of claim 1 to require, instead, “two active nodes monitoring one another to detect if one becomes disconnected from the network.” Such a construction should be rejected at least because claim 3 confirms that claim 1 encompasses, *though does not itself require*, that “each active node carries out the monitoring of the other.” *Id.*

Independent claim 11 differs from claims 1 and 18 in that claim 11 is directed (in its preamble) to “[a] wireless communication network” and recites its “monitoring” phrase in the

context of “a subset [of the plurality of nodes] which are active nodes that in fact carry out the AAA functions for the network by employing their respective user databases, said active nodes monitoring one another to detect if an active node becomes disconnected from the network[.]” Independent 11 is likewise agnostic as to the number of nodes in the “subset thereof which are active nodes.” This is confirmed by dependent claim 16, which recites “[t]he wireless communication network of claim 11, wherein the subset includes no more than two of the plurality of nodes.” Claim 16 confirms that claim 11 encompasses, *though is not limited to*, the scenario where precisely *two* active nodes are monitoring one another to detect if an active node becomes disconnected from the network. This provides an additional basis to reject Microsoft’s construction is violating the doctrine of claim differentiation, as Microsoft’s construction would incorrectly restrict all “monitoring” recited in the independent claims to “*two active nodes monitoring* one another to detect if one becomes disconnected from the network.”

Accordingly, for multiple reasons, the claim language itself reveals Microsoft’s error in seeking to indiscriminately define the disputed “monitoring” phrases to all require “two active nodes monitoring one another to detect if one becomes disconnected from the network.”

##### **5. “each of said nodes having a user database”**

The phrase “each of said nodes having a user database” (recited only in the preamble of independent claim 18) uses straightforward English and requires no construction. Microsoft errs in seeking to redraft the disputed phrase to require, instead, “each of said nodes *maintaining its own* user database.”<sup>2</sup> Microsoft’s impermissible rewrite should be rejected as not required by claim terms nor unambiguously required by either the specification or the prosecution history.

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<sup>2</sup> Because Microsoft seeks construction of this term, which is recited only in the preamble of claim 18, Microsoft evidently takes the position that the preamble of Claim 18 is limiting.

*Dayco Prods., Inc. v. Total Containment, Inc.*, 258 F.3d 1317, 1327 (Fed. Cir. 2001); *K-2 Corp. v. Salomon S.A.*, 191 F.3d 1356, 1362-63 (Fed. Cir. 1999).

Microsoft errs in apparently seeking to newly require an exclusive, one-to-one relationship between node and user database, where each node must *maintain* (a word not recited in claim 18) *its own* database. Microsoft's new, narrowing couplet "its own" is found nowhere in the '702 patent. The intrinsic evidence contains no unambiguous disclaimer of the possibility for two nodes using the same user database, for example. Microsoft also errs by proposing to replace the word "having" with "maintaining" instead. It is unclear why Microsoft refuses to accept the patentee's word choice of "having" in the recited context. Because the '702 patent specification uses *both* words, the patentee's word choice here of "having" should be given meaningful effect.

#### **6. "activating the AAA functions of the active nodes"**

Given Microsoft has proposed constructions for "the AAA functions" and "active nodes" it is surprising it challenges the presumed definiteness of the phrase "activating the AAA functions of the active nodes" (recited in claim 1). Microsoft appears to only take umbrage with word "activating" in the recited context. According to Microsoft, "[a] Skilled Artisan would not be able to reasonably understand how this limitation is satisfied because the AAA functions of an active node are, by definition, already activated." Microsoft's Invalidity Contentions dated Nov. 6, 2020, at 42 ("461-MIC"). Microsoft is wrong.

The claim language in question "inform[s] those skilled in the art about the scope of the invention with reasonable certainty." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 910, 134 S. Ct. 2120, 2129 (2014). Claim 1 recites the claim language in question in the context of "(a) selecting two of the plurality of nodes to be active nodes; [and] (b) activating the AAA functions of the active nodes[.]" It is significant that step (a) of claim 1 recites the verb form "to be" (i.e., "*to be* active nodes"). This word choice makes clear that the nodes selected in step (a)

are those that *will become* “active nodes” by executing the “activating” step (b). In step (b), use of the article “the” in the phrase “the active nodes” is simply an antecedent reference to those nodes selected “*to be* active nodes” in step (a). Microsoft’s Invalidity Contentions do not provide clear and convincing evidence sufficient to rebut the presumption of definiteness of “activating the AAA functions of the active nodes” (as recited in claim 1).

**B. Terms of the ’702 patent which Microsoft seeks to challenge as indefinite**

- 7. “geographic distance therebetween is maximized”, “geographic distance between active nodes is maximized”, “geographic distance between it and the active node which got disconnected from the network is maximized”, and “node selected in step (d) is chosen to maximize a sum of a geographic distance between the active nodes and a geographic distance between the node selected in step (d) and the node which got disconnected from the network”**

Microsoft seeks to challenge as indefinite certain “geographic distance” limitations recited in claims 2 and 5-7 (all depending directly or indirectly from claim 1). 461-MIC, 41-42. Microsoft’s Invalidity Contentions identify three bases for the indefiniteness objection. *Id.* Each alleged basis lacks merit.

Microsoft first alleges (without citation) that “there are multiple methods of calculating geographic distance (*e.g.*, flat surface, spherical surface, and ellipsoidal surface methods) and the specification does not identify any single method.” *Id.* Even if one were to take Microsoft at its word, it nevertheless has failed to explain how any of the purported “different methods of calculating” would produce different results here. If a collection of nodes that may each be selected as active nodes are roughly spaced along a line, for example, a person of ordinary skill in the art would be able to readily determine which pair, if selected as active nodes, would result in a maximum geographic distance therebetween (*i.e.*, vis-à-vis other possible pairs). The pair having the maximized distance would be the same regardless of how the distance values are calculated. This result does not change if the nodes are interspaced in various geographic locations that do not

roughly form a line. The pair with the maximized geographic distance therebetween is determinable with *reasonable certainty*; and neither the claim language nor the legal standard demand *absolute certainty* as to the value of the maximized distance (*e.g.*, in terms of feet or miles).

Microsoft next alleges, without referring to any of the challenged claims in particular, that “the claim does not specify how to determine when a ‘geographic distance’ is “maximized.” *Id.* Microsoft’s objection appears to go to alleged inoperativeness under 35 U.S.C.A. § 101 or lack of enablement under 35 U.S.C.A. § 112, ¶ 1, neither of which is a challenge based on the distinct definiteness requirement. *See North American Vaccine, Inc. v. American Cyanamid Co.*, 7 F.3d 1571, 1579 (Fed. Cir. 1993) (distinguishing objections of “inoperativeness under 35 U.S.C.A. § 101 or lack of enablement under 35 U.S.C.A. § 112, ¶ 1” from that of indefiniteness); *Augme Techs., Inc. v. Yahoo! Inc.*, 755 F.3d 1326, 1340 (Fed. Cir. 2014) (same); *TQ Delta, LLC v. 2Wire, Inc.*, 2019 WL 1553805, \*9 (D. Del. 2019) (granting patentee summary judgment that a challenged claim was not invalid for indefiniteness, the court finding that the accused infringer’s technical expert’s opinion conflated lack of written description or enablement with indefiniteness since the claim term and its scope was understandable, and the technical expert’s opinion only went to whether it could be performed). In any event, a person of ordinary skill in the art, having reviewed the teachings of the ’702 patent, would be able to compare respective geographic distances between pairs of nodes to select, with reasonable certainty, the pair with the *maximum* distance therebetween.

Finally, Microsoft argues “even assuming for purposes of argument that a ‘maximized’ geographic distance could be measured and determined, a Skilled Artisan would still not be able to choose two active nodes such that a ‘geographic distance’ between them is ‘maximized’ at least



because the geographic distance between any two nodes is fixed and can be neither maximized nor minimized.” 461-MIC, 41. Here again, Microsoft conflates indefiniteness with other considerations of validity. Mere objections of inoperability are “irrelevant to definiteness under § 112, ¶ 2” and such objections say “nothing about a skilled artisan’s understanding to the bounds of the claimed invention.” *Miles Laboratories, Inc. v. Shandon Inc.*, 997 F.2d 870, 875, (Fed. Cir. 1993). Furthermore, Microsoft’s objection fails to comprehend that the pair of nodes with the maximized geographic distance therebetween is determinable with *reasonable certainty*, as explained above.

For the foregoing reasons, Microsoft’s Invalidity Contentions do not provide clear and convincing evidence sufficient to rebut the presumption of definiteness of the identified “geographic distance” limitations recited only in certain dependent claims.

**8. “logging changes to the user databases for the active nodes thereby updating the same to reflect changes in information contained therein” and “wherein each of the active nodes logs changes to its user database thereby updating the same to reflect changes in information contained therein”**

Microsoft purports to challenge the presumed definiteness of the phrases “logging changes to the user databases for the active nodes thereby updating the same to reflect changes in information contained therein” (recited in claims 9 and 18) and “wherein each of the active nodes logs changes to its user database thereby updating the same to reflect changes in information contained therein” (recited in claim 13). 461-MIC, 43. However, Microsoft’s Invalidity Contentions fail to offer clear and convincing evidence sufficient to rebut the presumption of definiteness.

In its Invalidity Contentions, Microsoft first argues that “a Skilled Artisan would not be able to ascertain with certainty whether “logging changes to the user databases” means using a database to log information that has changed or logging when information in a database changes

(or something else entirely).” *Id.* Microsoft’s use the word “logging” in its objection is a tacit admission that the word “logging” is not itself indefinite in the recited context. Microsoft’s argument that the recitation “logging changes to the user database” encompasses multiple possible embodiments does not support an argument of indefiniteness because [b]readth is not indefiniteness.” *Biosig Instruments, Inc. v. Nautilus, Inc.*, 715 F.3d 891, 902, (Fed. Cir. 2013), *vacated on other grounds and remanded*, 572 U.S. 898, 913 (2014), *adhered to on remand*, 783 F.3d 1374, 1382-84, (Fed. Cir. 2015).

Contrary to what Microsoft suggests, it is also immaterial to the question of indefiniteness whether the claim language sufficiently specifies (at least to Microsoft’s liking) precisely *how* the claimed “logging” is to be performed. An objection concerning alleged inoperativeness under 35 U.S.C.A. § 101 or lack of enablement under 35 U.S.C.A. § 112, ¶ 1 is not a basis to challenge the distinct definiteness requirement. *See North American Vaccine, Inc. v. American Cyanamid Co.*, 7 F.3d 1571, 1579 (Fed. Cir. 1993) (distinguishing objections of “inoperativeness under 35 U.S.C.A. § 101 or lack of enablement under 35 U.S.C.A. § 112, ¶ 1” from that of indefiniteness); *Augme Techs., Inc. v. Yahoo! Inc.*, 755 F.3d 1326, 1340 (Fed. Cir. 2014) (same); *TQ Delta, LLC v. 2Wire, Inc.*, 2019 WL 1553805, \*9 (D. Del. 2019) (granting patentee summary judgment that a challenged claim was not invalid for indefiniteness, the court finding that the accused infringer’s technical expert’s opinion conflated lack of written description or enablement with indefiniteness since the claim term and its scope was understandable, and the technical expert’s opinion only went to whether it could be performed).

Microsoft next argues that “a Skilled Artisan would be unable to ascertain with reasonable certainty whether ‘updating the same’ refers to user databases, active nodes, some combination of the two, or some undefined ‘log.’” 461-MIC, 43. Microsoft’s conclusory assertion cannot

withstand scrutiny in view of the intrinsic evidence. As recited in claims 9 and 18, the clause “... updating the same ...” appears in the fuller context of “logging changes to the user databases for the active nodes thereby *updating the same* to reflect changes in information contained therein.” The clause “to reflect changes in information contained therein” modifies the clause “updating the same” and thereby confirms that the element referred to as “the same” is the one that “reflect[s] *changes* in information contained therein.” In view of this definitive context, and given the same step further recites, at the outset, “logging *changes to the user databases*”, a person of ordinary skill in the art would readily recognize that “updating the same” refers back to “the user databases” term.

This understanding is further confirmed by comparing relevant claim language recited in dependents claim 13 and 14. Claim 13 recites (in part) “wherein each of the active nodes logs changes to its user database thereby updating the same to reflect changes in information contained therein.” Claim 14, which depends from claim 13, further recites “wherein each of the active nodes communicates its logged changes to the other active nodes *so that their user databases are similarly updated*.” The identification (in claim 14) of “their user databases” as the elements that must be “similarly updated” confirms that (in claim 13) it is the “user database” that is the object of the “updating the same” clause.

This plain reading of the claim language in question is consistent with corresponding written description of the specification. For example, the specification includes the following description of a preferred embodiment: “[t]o maintain synchronization, any changes to the user database of one active node are logged, and the logged changes are communicated to the other active node *so that its user database is similarly updated*.” (’702 patent, 3:50-52.) This disclosed example expressly identifies the “user database” as being updated.

Finally, Microsoft argues that “a Skilled Artisan would not be able to determine with reasonable certainty what it means to ‘updat[e] the same to reflect changes in information contained therein’ at least because it is unclear what it would mean to update something to reflect a change that had already been made to that thing.” 461-MIC, 43. As discussed above, however, an objection concerning alleged inoperativeness under 35 U.S.C.A. § 101 or lack of enablement under 35 U.S.C.A. § 112, ¶ 1 is not a basis to challenge the distinct definiteness requirement. *See, e.g., North American Vaccine*, 7 F.3d at 1579; *Augme Techs.*, 755 F.3d at 1326; *TQ Delta*, 2019 WL 1553805, \*9. Microsoft also overlooks the claim language in question, and the corresponding disclosure, refers to *multiple* “active nodes”. In view of this context, one of ordinary skill in the art would recognize that the invention as disclosed and claimed enables logging changes to one active node in a manner that facilitates similarly updating other active nodes. (*See* ’702 patent, 3:50-52.) (“To maintain synchronization, any changes to the user database of one active node are logged, and the logged changes are communicated to the other active node so that its user database is similarly updated.”)

### **III. Terms of U.S. Patent No. 7,366,160 (Case No. 6:20-cv-00454-ADA)**

#### **A. Disputed terms of the ’160 patent which only Microsoft seeks to construe**

##### **1. “selecting two or more parameters of a network” and “measuring and/or calculating at two or more times values of the network parameters”**

The “selecting ...” step of claim 1 requires no construction and the Court should reject Microsoft’s attempt to add extraneous limitations. Adding limitations neither required by claim terms nor unambiguously required by either the specification or the prosecution history of a patent is impermissible. *See, e.g., Cont’l Circuits LLC v. Intel Corp.*, 915 F.3d 788, 796–97 (Fed. Cir.), *cert. denied*, 140 S. Ct. 648 (2019); *Dayco Prods., Inc. v. Total Containment, Inc.*, 258 F.3d 1317, 1327 (Fed. Cir. 2001).

Microsoft errs in seeking to restrict the phrase “selecting two or more parameters” to require, instead, “selecting two or more *different types of* parameters.” Microsoft’s proposed construction here does not purport to define any term recited in the “selecting” step of claim 1. Rather, Microsoft seeks to add the extraneous requirement that the recited “two or more parameters” must *each* be of *different types*. This is a significant departure from the claim language as recited. Nothing in the intrinsic evidence, including the claim language Microsoft seeks to construe, unambiguously disclaims selecting two or more parameters of *similar* type. On the contrary, in describing an example embodiment, the specification provides a non-exhaustive list of example “parameters” that may be used together and then it states, “parameters *of this kind* enable the reliability of the network service to be determined, for example.” (’160 patent, 2:64-3:8, emphasis added.)

For analogous reasons, Microsoft also errs in interpreting “measuring and/or calculating at two or more times values of the network parameters” (as recited in claim 1) to require “measuring and/or calculating at two or more times values of the two or more *different types* of network parameters.”

## 2. “network parameter”

The term “network parameter” is recited in claims 1 and 3 in plural form; and it also recited in claim 5 in the context of “determining a network parameter trend[.]” In each instance, the term “network parameter” requires no construction because the words “network” and “parameter” are both terms of art in the recited contexts. In addition, claim 1 provides definitive statements in the surrounding context, such as a “network parameter” being “representative of a network service and variable in time” and having “measured and/or calculated parameter values[.]”

Microsoft errs in seeking to rewrite “network parameter” as “measurable service level specifications from which service indicator values can be determined.” The claim language itself

refutes Microsoft’s untethered “measurable” requirement. The phrase “measured *and/or calculated* parameter values” (recited in claim 1) makes clear that the “values” of a “network parameter” are not necessarily *measured* values. That Microsoft uses the word “determined” in its construction for “network parameter” only undermines its position that the “determining” term requires construction in other recited contexts.

Microsoft also errors in seeking to define “network parameter” (in the singular) as requiring *multiple* service level specifications “from which service indicator values can be determined.” Claim 1 does not recite service indicator values are determined from *network parameters*. Rather, claim 1 recites “determining ... the value of a service indicator as a function of said measured and/or calculated *values*” of the network parameters. This additional aspect of Microsoft’s construction should also be rejected as *either* untethered to what claim 1 actually recites, *or* as impermissibly rendering that portion of the claim language superfluous. *Power Mosfet Techs., L.L.C. v. Siemens AG*, 378 F.3d 1396, 1410 (Fed. Cir. 2004) (“interpretations that render some portion of the claim language superfluous are disfavored.”).

It is anticipated that Microsoft will allege the specification contains lexicography by describing an example embodiment, in part, as follows: “[i]n this way a number of network parameters, also known as service level specifications (SLSs), can be identified for preferential observation in order to determine the level of service.” (’160 patent, 2:64-67.) This statement is not offered in the specification as a *definition*, but rather as an *alternative description*. Moreover, the statement expressly pertains to “a number of network parameters” according to a particular example embodiment. It is not unambiguously offered as explicit lexicography that necessarily pertains universally to *all* network parameters. See *Fisher-Rosemount Sys., Inc. v. Invensys Sys., Inc.*, No. A-13-CA-587-SS, 2015 WL 1275910, at \*11 (W.D. Tex. Mar. 19, 2015) (instructing that

“[l]exicography only arises when the patent drafter ‘clearly, deliberately, and precisely define[s] the term’” and that “[c]lear definitions are usually set off by quotation marks or are marked by the word ‘is.’” (citing *Sinorgchem Co., Shandong v. Int’l Trade Comm’n*, 511 F.3d 1132, 1136 (Fed. Cir. 2007)); *see also Resonate Inc. v. Alton Websystems, Inc.*, 338 F.3d 1360, 1364–65 (Fed. Cir. 2003) (“[T]he written description is not a substitute for, nor can it be used to rewrite, the chosen claim language.”). In any event, as discussed above, Microsoft’s construction departs from this exemplary statement in the specification in several respects (*e.g.*, by introducing an extraneous “measurable” requirement and by further proposing the extraneous requirement “from which service indicator values can be determined”).

**3. “determining at two or more times the value of a service indicator”, “determining a trend of the indicator”, and “determining as a function of the trend of the indicator”**

The “determining” limitations of claim 1 require no construction. The Court should give effect to the terms chosen by the patentee; and the Court should reject Microsoft’s proposed constructions for the “determining” terms as deviating from the plain and ordinary meaning, conflicting with intrinsic evidence, and erroneously rewriting the claims. *See, e.g., K-2 Corp. v. Salomon S.A.*, 191 F.3d 1356, 1364 (Fed. Cir. 1999) (“Courts do not rewrite claims; instead, we give effect to the terms chosen by the patentee.”); *Tex. Instruments, Inc. v. U.S. Int’l Trade Comm’n*, 988 F.2d 1165, 1171 (Fed. Cir. 1993) (“[C]ourts can neither broaden nor narrow claims to give the patentee something different than what he has set forth.”).

Microsoft first errs in attempting to rewrite “determining” as “computing” in the recited contexts. Nothing in either the ’160 patent itself or its prosecution history compels the erroneous rewrite Microsoft proposes. While the word “determining” appears throughout the ’160 patent in various contexts, the word “computing” does not appear even once in the specification. That the “service indicator” recited in claim 1 need not be computed in every instance is also confirmed,

for example, by the disclosure that “the indicator can also be defined by the values of different parameters at different times” (’160 patent, 2:62-63)—i.e., the determining may simply involve retrieving stored value(s).

Microsoft’s construction also runs afoul of the presumption “that the use of . . . different terms in the claims connotes different meaning.” *CAE Screenplates Inc. v. Heinrich Fiedler GmbH & Co. KG*, 224 F.3d 1308, 1317 (Fed. Cir. 2000). Claim 1 “measuring and/or calculating” *in addition to* the “determining” limitations at issue. This explicit term differentiation, recited in the same claim, confirms “determining” is not interchangeable with either the “measuring” or “calculating” terms. Rewriting “determining” as “computing” in this context, however, risks unduly narrowing the scope of the “determining” term, especially if the recited term “calculating” and Microsoft’s extraneous word “computing” are considered synonyms.

Microsoft compounds the error of its impermissible rewrite by seeking to replace the recited phrase “as a function of” with “using” instead, *though apparently only in certain instances*. For example, Microsoft seeks to rewrite “determining at two or more times the value of a service indicator as a function of said measured and/or calculated parameter values” as, instead, “*computing* at two or more times the value of a service indicator *using* the measured and/or calculated parameter values.” For the phrase “determining *as a function of* the trend of the indicator a time of the service indicator crossing a defined threshold,” however, Microsoft uses phrase “as a function of” in its proposed construction, thereby recognizing this phrase should be afforded its plain and ordinary meaning. The court should give effect to the qualifying phrase chosen by the patentee—“*as a function of*”—which appears repeatedly throughout the ’160 patent.

#### **4. “service indicator”**

The “service indicator” term (recited in claim 1) requires no construction, particularly given the definitive context in which it is recited. Microsoft errors in seeking to rewrite the term



“service indicator” as “an indicator of the *quality* of a *network* service *distinct from the network parameters*.” Yet again, Microsoft impermissibly seeks to add limitations neither required by claim terms nor unambiguously required by either the specification or the prosecution history. *See, e.g., Cont’l Circuits*, 915 F.3d at 796–97; *Dayco Prods.*, 258 F.3d at 1327.

The word “quality” appears but once in the ’160 patent, though only in the background section in the context of *distinguishing* disclosure of “[p]atent application WO /01/80492.” (’160 patent, 1:14-19.) This background disclosure does not unambiguously require an extraneous “quality” limitation for the “service indicator” term. Moreover, nothing in the intrinsic evidence unambiguously requires that the claimed “service indicator” must itself pertain only to “*the quality* of a *network* service” in particular.

Microsoft’s erroneous construction also unnecessarily injects ambiguity into a straightforward term that should simply be afforded its plain and ordinary meaning. It is unclear, for example, whether Microsoft’s proposed construction would require (1) “an indicator” that is itself “distinct from the network parameters” or, instead, (2) “a network service” that must itself be “distinct from the network parameters” (or something else). Regarding the first possibility, the interpretation that a “service indicator” must itself be “distinct from the network parameters” would risk excluding, for example, a preferred embodiment where the service indicator is a “plane” *defined by a collection of parameters*. (’160 patent, 4:11-33.) The Federal Circuit recently reiterated “[a] claim construction that ‘excludes the preferred embodiment is rarely, if ever, correct and would require highly persuasive evidentiary support.’” *Eko Brands, LLC v. Adrian Rivera Maynez Enterprises, Inc.*, 946 F.3d 1367, 1373 (Fed. Cir. 2020) (quoting *SynQor, Inc. v. Artesyn Techs., Inc.*, 709 F.3d 1365, 1378–79 (Fed. Cir. 2013), which quotes *Adams Respiratory Therapeutics, Inc. v. Perrigo Co.*, 616 F.3d 1283, 1290 (Fed. Cir. 2010)). The second possibility

also cannot withstand scrutiny. Claim 1 introduces the “service indicator” term in the context of it being determined “... as a function of said measured and/or calculated parameter values of the network parameters”—i.e., values of the “two or more parameters . . . representative of a network service”. This surrounding context refutes a contrived interpretation that the “service indicator” must somehow pertain to a *distinct* network service—i.e., one that must be distinct from network service(s) of which the selected parameters are representative.

**5. “determining as a function of the trend of the indicator a time of the service indicator crossing a defined threshold”**

In addition to the error addressed above (in addressing the “determining” steps in general), Microsoft further errs in seeking to restrict the phrase “a time of the service indicator crossing a defined threshold” (as recited in claim 1) to require, instead, “*the time remaining for the indicator crossing a defined threshold.*” Yet again, Microsoft does not seek to *define* any term, but rather it impermissibly seeks to narrow claim scope by adding extraneous limitations. This is contrary to established law addressed above. *See, e.g., Cont’l Circuits*, 915 F.3d at 796–97; *Dayco Prods.*, 258 F.3d at 1327.

The prosecution history contains no clear and unambiguous disavowal of claim scope compelling the extraneous limitations Microsoft seeks to add. *Tech. Properties Ltd. LLC v. Huawei Techs. Co.*, 849 F.3d 1349, 1357 (Fed. Cir. 2017) (prosecution disclaimer doctrine “does not apply unless the disclaimer is ‘both clear and unmistakable to one of ordinary skill in the art.’”) (quoting *Elbex Video, Ltd. v. Sensormatic Elecs. Corp.*, 508 F.3d 1366, 1371 (Fed. Cir. 2007). On the contrary, the prosecution history includes the statement that “[t]he trend indicators of the cla[i]med invention are used, *for example*, to define service evolution forecasts, making it possible to establish functions *such as* time remaining for a threshold crossing and a level of service after a predetermined time.” Remarks dated Nov. 19, 2007, to Office Action dated July 19, 2007, at p. 4

(emphasis added). Use of “for example,” “making it possible,” and “such as” in these remarks confirms that the function “*time remaining* for a threshold” is a non-limiting and exemplary advantage that the claimed “trend indicators” may possibly achieve. This comes nowhere close to a clear and unambiguous disavowal of claim scope. *See Purdue Pharma L.P. v. Endo Pharmaceuticals Inc.*, 438 F.3d 1123, 1136 (Fed. Cir. 2006) (ruling that statements in the prosecution history that claimed “controlled release” drug product permitted control over pain in a substantially narrow dosage range than prior art products did not operate as a disclaimer because the statements described a property of using the product but not a necessary feature of the product).

**B. Terms of the '160 patent which Microsoft seeks to challenge as indefinite**

**6. “neural network determines rules of association between a service trend and service parameter values”**

Microsoft purports to object to the presumed definiteness of the entire phrase “neural network determines rules of association between a service trend and service parameter values” (as recited only in dependent claim 7). In its Invalidity Contentions, however, Microsoft limits its indefiniteness challenge to the phrase “rules of association” only. Microsoft’s Invalidity Contentions dated Nov. 6, 2020 (“454-MIC”), 49. According to Microsoft, “[r]ules of association’ is not a term of art and not something that would have a defined meaning to a Skilled Artisan.” *Id.* While Microsoft further alleges that “[t]he ’160 patent does not describe any ‘rules of association[,]’” Microsoft equivocates by presenting arguments “[t]o the extent *weighting* constitutes a ‘rule of association[,]’” *Id.* Because Microsoft’s Invalidity Contentions fail to disclose a cognizable basis to dispute the presumed definiteness of the “rules of association” term, it has not and cannot meet its burden to overcome that presumption.

While the burden never shifts to the patentee to defend the *presumed* definiteness of a claim term, it is telling that Microsoft’s Invalidity Contentions overlook the informative context in which

the “rules of association” term is recited. Specifically, claim 7 recites “[t]he method of claim 6, further comprising a training step in which the neural network determines rules of association between a service trend and service parameter values.” The “association” is defined in the claim language as being “between a service trend and service parameter values”—i.e., between claim terms that Microsoft does not dispute are sufficiently definite. Furthermore, in view of the surrounding context in which “rules of association” is recited, a person of ordinary skill in the art would naturally look to description in the specification corresponding to “a training step” as claimed. Even a cursory review would have revealed at least the following passage to be relevant:

Use of a neural network can comprise a plurality of steps. In a first time period, a training base is formed, based on experimental results, for example. The training base comprises a multitude of output neuron states as a function of input neuron states. During a training step, the training base is integrated into the neural network. The training step consists of determining the weights of the neural connections of the neural network using training rules. Error gradient backpropagation rules can be used. This method is known in the art and consists in weighting the links between the neurons and recurrently correcting the weightings. Thus the result obtained with a test weighting is compared with a result fixed previously in the training base. The recurrent process is interrupted when the error in respect of the output neurons is below a predetermined threshold. Neural network software is available, for example the Stuttgart Neural Network Simulator. The neural network can also be implemented in the form of an integrated circuit. The person skilled in the art knows how to choose an appropriate number of hidden layers as a function of the complexity of the network service to be monitored.

(’160 patent, 6:16-36.) The passage quoted above provides an example where the specification expressly invokes certain terms (*e.g.*, “training step” and “rules”) recited in claim 7.

Accordingly, when the phrase “rules of association” is read in the fuller context in which it is recited in claim 7, and further considered in light of relevant disclosure in the remainder of the ’160 patent specification (*e.g.*, including at least the passage quoted above), the claim language “inform[s] those skilled in the art about the scope of the invention with reasonable certainty.” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 910 (2014). Microsoft has not disclosed in its Invalidity Contentions any cognizable basis to prove indefiniteness of this claim language by clear and convincing evidence.

**7. “calculating a mathematical expectation of financial loss as a function of the network service trend determined”**

Microsoft’s Invalidity Contentions purport to raise indefiniteness and written description challenges of the phrase “calculating a mathematical expectation of financial loss as a function of the network service trend determined” (recited only in dependent claim 10). Yet Microsoft offers only a curt, single paragraph (reproduced below in its entirety) purportedly disclosing the entire basis for both challenges:

The ’160 patent does not describe how a Skilled Artisan could determine with reasonable certainty a “financial loss” or “mathematical expectation.” For example, a Skilled Artisan would not understand the full scope of factors that can be considered when determining a “financial loss.” Additionally, a Skilled Artisan could not determine with reasonable certainty what constitutes a “mathematical expectation” of financial loss because that term has no ordinary meaning in the art and appears be duplicative of the “calculating” limitation. Finally, the description that corresponds to this limitation in the ’160 patent is insubstantial. A Skilled Artisan would not understand that the patentee possessed all modes of calculating financial loss based on such a description.

454-MIC, 50.

As shown by the block-quotation above, Microsoft’s objection focuses exclusively on the terms “financial loss” and “mathematical expectation.” Microsoft conflates the definiteness requirement with that of enablement and the written description, however. Microsoft first alleges that “[t]he ’160 patent does not describe *how*” to implement the claim language in question. *Id.* (emphasis added). Enablement is a distinct requirement of indefiniteness, however. *See Biosig Instruments, Inc. v. Nautilus, Inc.*, 715 F.3d 891, 902, (Fed. Cir. 2013), *vacated on other grounds and remanded*, 572 U.S. 898, 913 (2014), *adhered to on remand*, 783 F.3d 1374, 1382-84, (Fed. Cir. 2015) (distinguishing “enablement under § 112, ¶ 1 [from] indefiniteness under § 112, ¶ 2”); *see also Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1358 n.2 (Fed. Cir. 1999) (noting “that definiteness and enablement are analytically distinct requirements, even though both concepts are contained in 35 U.S.C.A. § 112.”).

Microsoft’s other stated objections are also inapposite to a definiteness challenge. Microsoft’s strawman attack on uncertainty purportedly arising from “the full scope of factors” (544-MIC, 50) is irrelevant here because the word “factors” is not recited in any claim. And because “[b]readth is not indefiniteness,”<sup>3</sup> Microsoft’s assertion that a “Skilled Artisan would not understand that the patentee possessed all modes of calculating financial loss based on such a description” (544-MIC, 50) is unavailing to a definiteness challenge. An objection based on the premise that a patent does not include disclosure sufficiently commensurate with the scope of the claims, if relevant at all, “provide[s] grounds for invalidity under § 112, ¶ 1 and not § 112, ¶ 2.” *Biosig*, 715 F.3d at 902; *see also In re Borkowski*, 422 F.2d 904, 909 (C.C.P.A. 1970) (explaining that if the disclosure of the specification “is not commensurate in scope with the subject matter

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<sup>3</sup> *Biosig Instruments, Inc. v. Nautilus, Inc.*, 715 F.3d 891, 902, (Fed. Cir. 2013), *vacated on other grounds and remanded*, 572 U.S. 898, 913 (2014), *adhered to on remand*, 783 F.3d 1374, 1382-84, (Fed. Cir. 2015) (citation omitted).

encompassed by a claim, that fact *does not render the claim imprecise or indefinite* or otherwise not in compliance with the second paragraph of § 112; rather, the claim is based on an insufficient disclosure.”) (emphasis added).

When considering actual claim language, as opposed to an untethered extraction thereof, claim scope is informed with reasonable certainty at least because (1) claim 10 recites the claimed “calculating” in terms of *what* must be calculated (“a mathematical expectation of financial loss”) and (2) it further recites the relevant definitional statement “as a function of the network service trend determined.” Moreover, as to the distinct requirement of enablement, a person of ordinary skill in the art would know to look to the specification for examples of *how* the claimed “calculating” may be performed.

For the “mathematical expectation” term, Microsoft alleges only that “a Skilled Artisan could not determine with reasonable certainty what constitutes a ‘mathematical expectation’ of financial loss because that term has no ordinary meaning in the art and appears be duplicative of the ‘calculating’ limitation.” 454-MIC, 50. When properly considered within its context, however, the “mathematical expectation” is not *duplicative* of the “calculating.” It refers to *what* is being calculated—i.e., “calculating *a mathematical expectation of financial loss* as a function of the network service trend determined”.

For the foregoing reasons, Microsoft has not disclosed in its Invalidity Contentions any cognizable basis to prove indefiniteness of the “calculating” step of dependent claim 10 by clear and convincing evidence.

#### **8. “determining a capacity to provide a network service at a given time”**

Microsoft purports to have preserved the right to challenge the presumed definiteness of the entire phrase “determining a capacity to provide a network service at a given time” (as recited

only in dependent claim 11). In its Invalidity Contentions, however, Microsoft focuses exclusively on the “capacity” term, arguing that “[a] Skilled Artisan would not be able to determine with reasonable certainty the meaning of ‘capacity.’” Microsoft’s Invalidity Contentions dated Nov. 6, 2020 (“454-MIC”), 49. The only alleged basis Microsoft disclosed in its Invalidity Contentions for its definiteness challenge of the “capacity” term is that “[t]he ’160 patent indicates ‘capacity’ can refer to either a network’s ability to support a service or a service provider’s willingness to offer a service” and that “[t]he ’160 patent provides no basis for a Skilled Artisan to choose between these meanings (or other meanings of the term).” *Id.*

Regardless whether Microsoft has correctly characterized the ’160 patent specification as describing “capacity” in at least two alternative contexts, and WSOU does not concede this is so, this would not overcome the presumption of definiteness for the “capacity” term. Claim terms are typically written in a manner that encompasses multiple disclosed embodiments within their scope. There simply is no legal basis to conclude that a claim term is rendered indefinite where it allegedly encompasses each of at least two alternatives. As discussed above, “[b]readth is not indefiniteness.” *Biosig*, 715 F.3d at 902; *see also Unwired Planet, LLC v. Apple Inc.*, 829 F.3d 1353, 1358, (Fed. Cir. 2016) (noting that because the disputed claim term did not specify how the input was transmitted, the term was broad enough to cover a voice input transmitted over a voice or data channel, and it thus was error to construe “voice input” to be limited to a voice input transmitted over a voice channel).

As Microsoft does not disclose in its Invalidity Contentions any other basis to dispute the presumed definiteness of the “capacity” term, Microsoft has not and cannot meet its burden to prove indefiniteness by clear and convincing evidence.



#### IV. Terms of U.S. Patent No. 8,274,902 (Case No. 6:20-cv-00465-ADA)

##### A. Disputed terms of the '902 patent which only Microsoft seeks to construe

###### 1. “network that branches, downstream of the collection point”

The term “network that branches, downstream of the collection point” (recited in independent claims 1 and 6) does not require court construction. Microsoft disagrees, yet it does not purport to *define* what any of the words recited in that phrase. Rather, as an apparent aside, Microsoft argues that the claim language “*refers* to a tree network.” Reducing claim language down to what it allegedly “refers” is not a proper construction.

Microsoft’s position should also be rejected as inconsistent with certain party admissions, of which the Court can and should take judicial notice. Specifically, Microsoft published a technical dictionary that offers multiple technical definitions for “branch” (as shown by the dictionary entry reproduced below).

**branch** *n.* **1.** A node intermediate between the root and the leaves in some types of logical tree structure, such as the directory tree in Windows or a tape distribution organization. **2.** Any connection between two items such as blocks in a flowchart or nodes in a network. *See* branch instruction.

Blanton, A., and Haynes, S., Microsoft Computer Dictionary Fifth Edition, Microsoft Press, 2002, p. 22. *See* Ex. A. As shown above, one technical definition Microsoft published for “branch” is “[a]ny connection between two items such as blocks in a flowchart or nodes in a network.” It is significant that of the two alternative definitions Microsoft offers “branch,” only one of them refers to a “logical tree structure.” *Id.* The absence of any reference to a “tree structure” in the definition broadly referring to “[a]ny connection between ... nodes in a network” serves as a party admission that the word “branch” in the context of networking does not necessarily refer exclusively to a *tree*

*network*. For this additional reason, the Court should reject Microsoft’s *non-definition* offered here as “refers to a tree network.”

## 2. “estimating a packet loss rate” and “an estimate of a packet loss rate”

The terms “estimating” and “estimate” (recited in claims 1 and 6, respectively) require no construction in their recited context, particularly given the specification here does not “clearly, deliberately, and precisely define[] the term[s].” *Sinorgchem Co., Shandong v. Int’l Trade Comm’n*, 511 F.3d 1132, 1136 (Fed. Cir. 2007); *accord, Fisher-Rosemount Sys., Inc. v. Invensys Sys., Inc.*, No. A-13-CA-587-SS, 2015 WL 1275910, at \*11 (W.D. Tex. Mar. 19, 2015) (“[l]exicography only arises when the patent drafter ‘clearly, deliberately, and precisely define[s] the term.’”) (citing *Sinorgchem*, 511 F.3d at 1136) (second alteration original). Nevertheless, Microsoft seeks to rewrite the “estimating” and “estimate” terms as, instead, “calculating an approximate” and “a calculation of an approximate” (respectively). Thus, Microsoft not only refuses to accept the patentee’s straightforward word choice, Microsoft also errs in seeking to add an extraneous “approximate” qualifier not recited in the claim language.

The specification confirms such a departure from the claim language is unwarranted here. The ’902 patent discloses certain examples procedures, also referred to therein as algorithms, that may be “applied to estimate the [packet] loss rate”. (’902 patent, 4:11-12.) In those examples, it is application of certain exemplary process(es) or algorithm(s) that returns what is referred to as an estimate of a packet loss rate. To be clear, the specification does not describe the result of a given estimation as necessarily pertaining *only* to an *approximation* of a merely theoretical packet loss rate. Nor does the specification state that any particular process or algorithm is necessary required. (*See, e.g., id.*, 4:15-18.) (“Those skilled in the art will understand that the precise process steps are subject to numerous variations, and as described are merely illustrative.”) What is

disclosed, in describing certain example embodiments, is that the estimated packet loss rate *is* the result obtained from applying any of the example procedure(s). In view of the intrinsic evidence, there is simply no need to adopt a construction that departs from the consistent “estimating” and “estimate” word choice of the patentee.

### 3. “packet loss rate”

The parties have both identified “packet loss rate” (recited in independent claims 1 and 6) as a term for the court to construe. The ’902 patent, in describing an example embodiment, provides a clarifying statement concerning the “packet loss rate” applied there as follows: “the packet loss rate, i.e., the fraction of packets that are lost over a suitable time-averaging interval[.]” (’902 patent, 3:46-47.) Microsoft proposes adopting this statement verbatim as the construction for the “packet loss rate” term. Because Microsoft does not seek to have the Court separately define “time-averaging”, Microsoft would impermissibly have the jury determine whether and how that couplet—which *is not recited in the claims*—might affect claim scope. Under the present circumstances, WSOU presently proposes simplifying the construction of “packet loss rate” to mean “fraction of packets that are lost over a suitable time interval.”

## B. Sole phrase of the ’902 patent which Microsoft seeks to challenge as indefinite

### 4. “wherein the collected data relate to packet losses on the portion of a GPRS core network extending from the collection point to a plurality of [base / mobile] stations”

Microsoft impermissibly conflates indefiniteness with other considerations of validity in raising objections to the limitation “wherein the collected data relate to packet losses on the portion of a GPRS core network extending from the collection point to a plurality of [base / mobile] stations” (recited in dependent claims 4 and 5). Microsoft’s curt, two-sentence indefiniteness objection set forth in its Invalidity Contentions is reproduced below:

A Skilled Artisan would not reasonably understand this claim limitation because it requires the impossible. Neither mobile stations nor base stations are a “portion of a GPRS core network,” as the claim required. Both are part of the radio access network.

Microsoft’s Invalidity Contentions dated Nov. 6, 2020 (“465-MIC”), 38.

Microsoft’s conclusory objections of inoperability are “irrelevant to definiteness under § 112, ¶ 2” and such objections say “nothing about a skilled artisan’s understanding to the bounds of the claimed invention.” *Miles Laboratories, Inc. v. Shandon Inc.*, 997 F.2d 870, 875, (Fed. Cir. 1993); *see also See North American Vaccine, Inc. v. American Cyanamid Co.*, 7 F.3d 1571, 1579 (Fed. Cir. 1993) (distinguishing objections of “inoperativeness under 35 U.S.C.A. § 101 or lack of enablement under 35 U.S.C.A. § 112, ¶ 1” from that of indefiniteness); *Augme Techs., Inc. v. Yahoo! Inc.*, 755 F.3d 1326, 1340 (Fed. Cir. 2014) (same); *TQ Delta, LLC v. 2Wire, Inc.*, 2019 WL 1553805, \*9 (D. Del. 2019) (granting patentee summary judgment that a challenged claim was not invalid for indefiniteness, the court finding that the accused infringer’s technical expert’s opinion conflated lack of written description or enablement with indefiniteness since the claim term and its scope was understandable, and the technical expert’s opinion only went to whether it could be performed).

Microsoft’s indefiniteness objection is not only flawed as a matter of law, Microsoft also errs in seeking to add extraneous limitations out of thin air. The claim language does not restrict either “mobile stations” or base stations” as being part of *a radio access network*. Indeed, the phrase “radio access network” appears nowhere in the ’902 patent. Microsoft compounds its error by erroneously suggesting that the claim language defines both the “base stations” and the “mobile stations” as being the “portion of a GPRS network” itself. Not so. The claim language plainly

recites the “portion of a GPRS core network” as a distinct claim element “extending from the collection point *to* a plurality of [base stations / mobile stations].”

Accordingly, Microsoft’s two-sentence objection set forth in its Invalidity Contentions fails to provide clear and convincing evidence sufficient to rebut the presumption of definiteness of the phrases Microsoft identified, which are recited in dependent claims 4 and 5.

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Respectfully submitted,

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**CERTIFICATE OF SERVICE**

A true and correct copy of the foregoing instrument was served or delivered electronically via U.S. District Court [LIVE]- Document Filing System, to all counsel of record, on this the 8<sup>th</sup> day of January, 2021.

/s/ Ryan S. Loveless  
Ryan S. Loveless